



Notebook PC technology that's changing the way consumers live.

**Intel® Centrino™
mobile technology.**

How to sell
to the consumer



Intel pioneers the next generation of mobile computing.

**Today's consumers are looking for technology to make
their busy lives easier—and for PCs that will keep
up with them as they work, play and study on the go.**

**Intel® Centrino™ mobile technology lets
consumers unwind their lives and experience
breakthrough performance* for a mobile world.**

Mobile lifestyles today and tomorrow.

In an increasingly mobile world, consumers are realizing the convenience and fun of having their PCs with them all the time, whether they're moving around the house or on the go.



In fact, the consumer notebook PC segment is the fastest growing segment in today's PC market.¹

Enter Intel Centrino mobile technology.

**For mobile consumers who want
to unwire their lives for the
utmost in freedom and flexibility.**



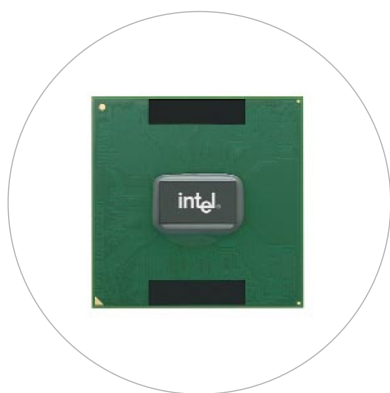
**MOBILE
TECHNOLOGY**

With wireless LAN (WLAN) connectivity, the freedom and flexibility of mobile computing is multiplied. Many consumers worldwide are already using broadband Internet connections. Consumers use these connections to surf the Web, download music and share digital photos as soon as they're taken. With the emergence of Wi-Fi technology, consumers are able to combine computing and connectivity for a whole new mobile experience.

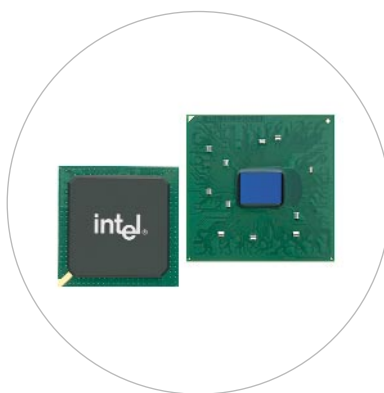
Today's wireless local area networks (WLANs) are easier and more affordable to set up at home. And the number of public Wi-Fi hotspot² users is growing rapidly, from 9.3 million in 2003 to 30 million in 2004.³ With wireless-enabled notebooks, consumers can connect to the Internet around their WLAN-enabled homes or at wireless hotspots while traveling, on campus or at the local coffee shop — without worrying about cables and plugs.⁺

Intel Centrino mobile technology enables what consumers want.

- The full functionality of a high-performance PC without lugging around a heavy machine
- Latest mobile technology that's easy to use
- A mobile PC that's sleek, light and handles their most demanding programs
- A notebook that goes where they go, enabled by extended battery life⁺
- The ability to take their digital entertainment with them everywhere
- On-the-go flexibility to stay connected,⁺ surf the Web and share digital media without plugging in
- Cutting-edge wireless freedom, with no need for cables, cards, antennas or plugs⁺
- The ability to connect wirelessly to home networks or public Wi-Fi hotspots⁺



Intel® Pentium® M processor



Intel® 855 chipset family



Intel® PRO/Wireless Network Connection

Intel's newest mobile technology opens the door to outstanding mobility, backed by the quality and reliability of the trusted Intel brand. Intel Centrino mobile technology is a breakthrough in mobile computing, enabling consumers to communicate, learn, work and play with more freedom than ever.

It's the first Intel technology that combines processor, chipset and integrated wireless LAN capability, and is designed specifically to enable thinner, lighter notebook PCs with extended battery life and outstanding mobile performance.⁺

Benefits across the board.

Intel Centrino mobile technology enables a new level of mobility — by delivering breakthrough mobile performance and integrated wireless LAN capability, while enabling extended battery life in thinner, lighter designs.*



So mobile consumers can stay mobile longer, do more and enjoy entertainment on the go. A breakthrough mobile experience and the perfect complement to any mobile lifestyle.



Uncompromise.

Breakthrough mobile performance⁺

- Higher performance with new 90 nm process technology, strained silicon technology and 2 MB power optimized on-die cache
- Performance headroom for enhanced multitasking capability

So consumers can

- Play DVDs, convert music and run processor-intensive applications on the go
- Run background tasks, such as virus scanning, compression and encryption, without affecting foreground applications

Unstress.

Enables extended battery life⁺

- Breakthrough mobile performance⁺ with efficient power usage and intelligent power distribution
- Mobility without worrying about plugging in⁺
- Flexibility to move between locations and make the most productive use of time

So consumers can

- Communicate, work, play or study for extended periods without having to plug in⁺
- Play the latest games and watch movies on an airplane or around the home



Untangle.

Integrated wireless LAN capability⁺

- Ability to connect to 802.11a,[∞] 802.11b and 802.11g Wi-Fi CERTIFIED[®] access points⁺
- Industry standard wireless LAN security support (such as 802.1x, WEP, WPA, AES[†]) available[§]

So consumers can

- E-mail friends, shop online, study or manage finances from inside the house or in the yard, free from the hassle of cables, cards, antennas and plugs⁺
- Check stocks at the airport, research school assignments at a coffee shop or surf the Web while watching TV in bed⁺



Unburden.

Thinner, lighter designs

- Packaging technology that enables breakthrough mobile performance in thinner notebooks⁺
- Enables notebook PCs <1" thick, and a range of designs from full size to sub-notebooks
- Lightweight, easy-to-carry notebook PCs that go easily wherever users go

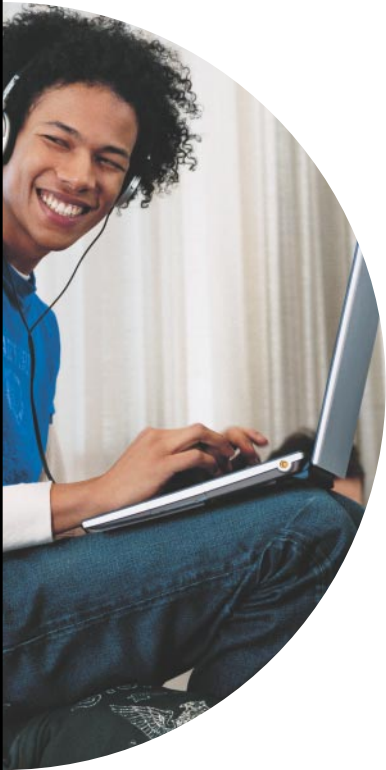
So consumers can

- Take lightweight PCs along by plane, car, bus, train or on foot, in a backpack, book bag or handbag
- Choose designs to suit individual styles and lifestyles



Understanding the technology.

Let's take a look at some of the Intel Centrino mobile technology features and how they work, using analogies consumers will readily understand.



Performance features

Micro-ops fusion Combines operations to reduce time and power required to execute instructions, similar to a taxi pooling multiple riders into a single trip to save time and energy.

Dedicated stack manager Uses dedicated hardware to keep track of internal "accounting," allowing the processor to execute program instructions without interruption, similar to express highways with "smart" toll booths, designed to eliminate stopping for payment, maximizing traffic flow.

Advanced instruction prediction Analyzes past behavior and predicts which operations are likely to be requested in the future, similar to a word processing program that completes a word after you type the first few letters, improving speed and efficiency.

Power management features

Intelligent power distribution Focuses system power where the processor needs it and shuts down anything not being used, similar to a motion sensor that turns lights on when you enter a room and shuts them off when you exit.

Enhanced Intel SpeedStep® technology Provides multiple voltage and frequency operating points to better match performance to application demand, similar to a "smart" dimmer switch that automatically adjusts the amount of light in a room based on user needs.



Wireless features

Single band, single band/dual mode and dual band* Wi-Fi CERTIFIED wireless LAN support Enables wireless connections to 802.11a,* 802.11b and 802.11g Wi-Fi CERTIFIED access points,* similar to a stereo that has the capability to play music from either a CD or a cassette tape.

Support for Intel® Wireless Coexistence System

Enables reduced interference between Intel PRO/Wireless Network Connection and certain Bluetooth* devices by coordinating their frequency usage, similar to a restaurant maitre'd who facilitates table seating by giving priority and choice of table to those with reservations vs. walk-in patrons.

Form factor features

Micro FCPGA/FCBGA packaging technology Innovative packaging that allows Intel Centrino mobile technology to fit into thinner notebook form factors and new smaller designs, similar to specially-designed APS film cartridges that are 25 percent smaller than 35mm cassettes, enabling more compact cameras.

Key Intel Centrino mobile technology benefits for consumers.

- Stay connected to the people and things that are most important to you, doing what you want on your PC where you are most comfortable, with a highly mobile wireless notebook powered by Intel Centrino mobile technology*
- Experience cutting-edge wireless freedom, with no need for cables, cards, antennas or plugs, and integrated WLAN capability to connect to your home network or public Wi-Fi hotspots at airports, cafes and on campus*
- Gain new, on-the-go flexibility to surf the Web, play and share digital media, manage your finances and more — and enjoy it all longer with the outstanding mobile performance and extended battery life that Intel Centrino mobile technology enables*
- Choose from sleeker styles in lightweight, easy-to-carry notebooks

Intel® Centrino™ mobile technology...More than a processor.

Intel® microprocessors	Mobile Intel® Pentium® 4 Processor - M	Intel® Pentium® M Processor	Intel Pentium M Processor
Processor number	NA	NA	7xx sequence of numbers ⁴
90nm process technology	No	No	Yes
On-die L2 cache	512 KB	1 MB	2 MB
Processor system bus	400 MHz	400 MHz	400 MHz
Micro-ops Fusion	No	Yes	Yes
Support for Enhanced Intel SpeedStep® technology	No ⁵	Yes	Yes
Support for Intel® Mobile Voltage Positioning IV (Intel® MVP)	No	Yes	Yes
Intel® chipsets	Intel® 845 chipset family	Intel® 855 chipset family	Intel 855 chipset family
Support for up to 2 GB of memory	No	Yes	Yes
USB 2.0 support	No ⁶	Yes	Yes
Discrete and integrated graphics solutions	No ⁶	Yes	Yes
Supports Intel® Display Power Saving Technology and Intel® Dual-Frequency Graphics Technology	No	Yes ⁷	Yes ⁷
Dynamic I/O buffer disabling for processor system bus and memory	No	Yes	Yes
Intel® wireless solution		Intel® PRO/ Wireless Network Connection	Intel PRO/ Wireless Network Connection
Single band 802.11b, single band/dual mode 802.11b/g and dual band 802.11a/b Wi-Fi CERTIFIED* wireless LAN support**	Intel® wireless components may be included in these systems and certain wireless features may be available, however Intel does not conduct the same validation as with the Intel® Centrino™ mobile technology components.	Yes	Yes
Industry standard wireless LAN security support (802.1X, WEP, WPA, AES+) available ⁸		Yes	Yes
Cisco* Compatible Extensions (such as LEAP and CKIP) support available ⁹		Yes	Yes
Intel® PROSet available with advanced profile management ⁹		Yes	Yes



**Intel's best technology for
the mobile lifestyles of
today's consumers.
Intel Centrino mobile
technology enables more
freedom than ever
to communicate, work
and play on the go —
with access to the
exciting new world of
wireless mobility.***

To learn more,
visit us on the Web at:

intel.com/home/notebooks



intel.com/home/notebooks

+ Wireless connectivity and some features may require you to purchase additional software, services or external hardware. Availability of public wireless LAN access points limited and some hotspots may not support Linux-based Intel Centrino mobile technology systems. System performance measured by MobileMark® 2002. System performance, battery life, wireless performance and functionality will vary depending on your specific operating system, hardware and software configurations. See http://www.intel.com/products/centrino/more_info for more information.

∞ Dual band WLAN supports low band capabilities (5.15 GHz to 5.35 GHz) only. Low band capabilities are not supported in all countries. Check with your PC manufacturer for details on availability.

‡ AES has specific operating system requirements, and requires both access point support and a PC software upgrade that will be available in 2H'04. Available on 802.11 b/g only. Check with your PC manufacturer for availability.

§ Some security solutions may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.

◇ Intel® PROSet for Wireless software may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.

1 Gartner, Inc., December, 2003

2 Hotspots are public spaces, such as airports, train stations, hotels and coffee shops that enable wireless Internet connections

3 Gartner, Inc., February, 2004

4 See http://www.intel.com/products/processor_number for more information

5 Mobile Intel® Pentium® 4 Processor - M has support for Enhanced Intel SpeedStep® technology without multiple voltage and frequency operating points

6 Available with Intel® 852GM chipset, an additional chipset option for Mobile Intel® Pentium® 4 Processor - M

7 Available with Intel® 855GME chipsets only

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*Other names and brands may be claimed as the property of others. 0504/RPC/LAI/PP/3K 252003-004

